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(54) **ULTRASOUND ELEMENT AND
ULTRASOUND ENDOSCOPE**

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claimer.

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(58) **Field of Classification Search**

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See application file for complete search history.

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(57) **ABSTRACT**

An ultrasound element includes a silicon substrate, a lower electrode layer that has a plurality of lower electrode sections, and a plurality of lower wiring sections, and is connected to a lower electrode terminal to which a drive signal and a bias signal are applied, a lower insulating layer, an upper insulating layer in which a plurality of cavities smaller than the respective lower electrode sections are formed, an upper electrode layer that has a plurality of upper electrode sections that are disposed to face the respective lower electrode sections via the respective cavities, and are smaller than the lower electrode sections and larger than the cavities, and a plurality of upper wiring sections, and is connected to an upper electrode terminal at a ground potential that detects a capacitance signal, and a protection layer.

8 Claims, 10 Drawing Sheets

